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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,681	06/26/2001	John Ricciardi	101831-163-NP	1660

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EXAMINER

CHENCINSKI, SIEGFRIED E

ART UNIT PAPER NUMBER

3628

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/891,681	Applicant(s) RICCIARDI, JOHN	
	Examiner Siegfried E. Chencinski	Art Unit 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 1. Claims 1-61 are rejected** under 35 U.S.C. 101 as being drawn to non-statutory subject matter.

With regard to representative claim 1,

First, there is no physical transformation of anything to another state or thing even though it is not dispositive.

Second, the results generated are not reproducible because there is nothing in the method steps to have two different users come up with the same result. In fact, the steps are such the same user may not be able to reproduce the results of a prior iteration if he has not recorded every step and assumption and judgement of his prior iteration in exact detail since the inputs required of the user are subjective since subjective components are not amenable to reproducibility. Therefore, the result is not concrete or tangible, but merely one of more numbers that may serve as input data for processing and use in a system not claimed.

Third, claim 1 recites no particular implementation of the classification result. The claim may require no more than viewing the result, and an individual recording the result on a piece of paper, or recording the result into a machine (not claimed) in a further process or step.

Therefore, the instant claims represent a disembodied "abstract idea" lacking any steps indicating how the required judgements are to be made or performed, such as establishing the time parameters and selecting an applicable historical price pattern. All the claims are thus drawn to the abstract idea of randomly classifying an arbitrarily selected historical price pattern, rather than to a practical application of the idea as

required by 35 U.S.C. 101. MPEP 706.03(a).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim1 and its dependent claims are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim lacks enablement because it is abstract, it lacks objective criteria for determining a time parameter, and thus lacks reproducible results.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: objective guidelines for obtaining a time parameter and for selecting an applicable historical price pattern. It is not clear how Applicant uses steps (b) and (d)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness s rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15, 16 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolton et al. (US Patent 5,414,838, hereafter Kolton) in view of Rickard et al. (US Patent 6,016,483, hereafter Rickard).

Re. Claim 1, Kolton discloses a method for classifying an investment item by historical price pattern, comprising the steps of:

- providing a plurality of said historical price patterns, each having associated therewith predefined logic rules (Col. 2, ll. 9-24; Col. 11, ll. 57-61);
- obtaining a time parameter (Col. 11, ll. 57-61);
- selecting an applicable historical price pattern for said investment item from said plurality of historical price patterns using said first historical price average, said second historical price average, and said third historical price average
Kolton does not explicitly disclose
- determining a first historical price average for said investment item;
- determining a second historical price average for said investment item;
- determining a third historical price average for said investment item; and
- verifying said investment item price activity exceeds a minimum volatility.
- selecting an applicable historical price pattern for said investment item from said plurality of historical price patterns using said first historical price average, said second historical price average, and said third historical price average.

However, Kolton suggests using price patterns of a great variety suitable to the user in Col. 2, ll. 9-24; Col. 11, ll. 57-61. Price averages of user determined time periods is one of a great number of such choices suggested by Kolton's disclosure. The general facility to use averages broadly is described in Col. 17, ll. 25-27, where one can average any series of prices. Further application of this feature is disclosed in Col. 20, ll. 17-39 – e.g. an 18 day average and a 50 day average. Kolton also clearly reads on the use of security price averages over user selected periods of time. Selecting three periods of time is merely an obvious user option among many analytical options. Also, volatility analysis is well known. For example, Rickard suggests verifying said investment item price activity exceeds a minimum volatility by suggesting the use of a

minimum (or maximum) volatility measure as a tool (Col. 10, ll. 56-59). Further, it is obvious that the time periods selected for averaging result from the analyst's evaluation of the historic price patterns. Therefore, it would have been obvious to the ordinary practitioner of the art at the time of Applicant's invention to modify Kolton's teaching with the art of Rickard in constructing a method for classifying an investment item by historical price pattern, motivated by the desire to offer an automated information search and retrieval system designed to facilitate research into the fluctuations of commodity prices over time, such as those in the stock market (Kolton, Col. 1, ll. 10-14).

Re. Claim 2, Kolton reads on a time parameter measured in any block of time (Col. 20, ll. 19-23).

Re. Claims 2-15 and 23-25, Kolton and Rickard disclose a method for classifying an investment item by historical price pattern.

Kolton and Rickard do not explicitly disclose:

Re. claims 3-8:

Re. Claim 3, set a historical price average as the most distant one-third of said time parameter.

Re. Claim 4, wherein said second historical price average is the middle one-third of said time parameter.

Re. Claim 5, wherein said third historical price average is the most recent one-third of said time parameter.

Re. Claim 6, wherein said third historical price average is the current price for said investment item.

Re. Claim 7, wherein said time parameter is determined by a user.

Re. Claim 8, wherein said time parameter is pre-determined.

However, re. claims 3-8, Kolton teaches a user having a wide, virtually unlimited latitude for selecting the time parameters and determining historical price analysis, including for the purpose of determining price averages. Therefore, an ordinary practitioner of the art would have found it obvious to have constructed:

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Re. Claim 3, set a historical price average as the most distant one-third of said time parameter.

Re. Claim 4, wherein said second historical price average is the middle one-third of said time parameter.

Re. Claim 5, wherein said third historical price average is the most recent one-third of said time parameter.

Re. Claim 6, wherein said third historical price average is the current price for said investment item.

Re. Claim 7, wherein said time parameter is determined by a user.

Re. Claim 8, wherein said time parameter is pre-determined.

Re. claims 9-15, Kolton and Rickard do not explicitly disclose:

Re. Claim 9, wherein said minimum volatility is determined by the steps of:

determining a first minimum value from the group consisting of said first historical price average, said second historical price average, and said third historical price average;
determining a first maximum value from the group consisting of said first historical price average, said second historical price average, and said third historical price average;

determining a first range value by subtracting said first minimum value from said first maximum value;

verifying said first range value is greater than two-thirds of the value of a volatility threshold.

Re. Claim 10, wherein said volatility threshold is set to an average tracking error value.

Re. Claim 11, wherein said volatility threshold is determined by the steps of:

determining a fourth historical price average for an investment item;

determining a fifth historical price average for said investment item;

determining a sixth historical price average for said investment item;

determining a second minimum value from the group consisting of said fourth historical price average, said fifth historical price average, and said sixth historical price average;

determining a second maximum value from the group consisting of said fourth historical price average, said fifth historical price average, and said sixth historical price average;

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determining a second range value by subtracting said second minimum value from said second maximum value;

assigning said volatility threshold the value of said second range value.

Re. Claim 12, wherein said fourth historical price average is the most distant of the second most recent block of time as measured by said time parameter.

Re. Claim 13, wherein said fifth historical price average is the middle one-third of the second most recent block of time as measured by said time parameter.

Re. Claim 14, wherein said sixth historical price average is the most recent one-third of the second most recent block of time as measured by said time parameter.

Re. Claim 15, wherein said price pattern classification for said investment item is determined to be "no pattern" for having insufficient volatility.

Therefore, it would have been obvious to the ordinary practitioner of the art at the time of Applicant's invention to modify Kolton's teaching with the art of Rickard in constructing a method for classifying an investment item by historical price pattern, motivated by the desire to offer an automated information search and retrieval system designed to facilitate research into the fluctuations of commodity prices over time, such as those in the stock market (Kolton, Col. 1, ll. 10-14).

Re. Claim 16, Kolton and Rickard disclose a method for classifying an investment item by historical price pattern. Kolton and Rickard do not explicitly disclose a plurality of historical price patterns which includes a rocket, bomb, slider, glider, mountain, valley, sinker, jumper, climber, stumbler, lowhook, and highhook. However, applicant's specification defines this terminology as labels for various trends in the historical price trend analysis of a particular security. Putting labels on phenomena including statistical trends was a long established and well known and even ubiquitous practice in US society at the time of Applicant's invention. The word chosen for use as a label often is one which suggests the phenomenon being labeled. Simple examples are "rising", "falling", "dynamic", "rapid" and "inactive". Sometimes words from a user's favorite avocation such as from baseball, tennis, football, soccer, flying, ice hockey, downhill skiing, music or the arts may be used. One example is the word "aced" from tennis. Another example from several sports is "score" or "scored" to describe success in

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reaching a goal or target of most any kind. In business trend analysis the expression "hockey stick" trend is popular to describe a trend where a short period of historic financial data points are either declining or flat, followed by a forecasted trend which is steadily upward. A failure in a data trend or in other activities is often labeled as a "bomb" or as something "bombed out". The word "crashed" is sometimes used for labeling a failure. On the other hand, an American Football fan would use the label "bomb" for a great success since that label is used for a successful long yardage gain obtained through the legal catching of a long pass and the gain of great yardage, often resulting in a touchdown. Therefore, the ordinary practitioner of the art would have had the latitude of using many different words as labels for these various trends in the price record of a security. Therefore, it would have been obvious to the ordinary practitioner of the art at the time of Applicant's invention to modify Kolton's teaching with the art of Rickard and what would be obvious and well known to the ordinary practitioner in constructing a method for classifying an investment item by historical price pattern, motivated by the desire to offer an automated information search and retrieval system designed to facilitate research into the fluctuations of commodity prices over time, such as those in the stock market (Kolton, Col. 1, ll. 10-14).

Allowable Subject Matter

5. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Hyung S. Sough, can be reached on (571) 272-6799.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington D.C. 20231

or faxed to:


(571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

(571) 273-6793 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC

March 20, 2006


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PRIMARY EXAMINER
AU 3628